Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Earthquake Tower Challenge Rubric**

\_\_\_\_\_\_/25 Tower stands by itself, secured to base, 36 cm tall with 2 stories that are at least 18 cm each.

\_\_\_\_\_\_/10 Building supports 1 sand bag on first story

\_\_\_\_\_\_/10 Building supports 1 sand bag on the top story

\_\_\_\_\_\_/10 Clear, detailed construction sketch – all parts are distinguishable and critical measurements are labeled.

\_\_\_\_\_\_/20 Structural Analysis completed (Questions 1-7) Answers are insightful, thorough, and meaningful.

\_\_\_\_\_\_/5 Minor quake – 1 bag on top

\_\_\_\_\_\_/5 Major quake – 1 bag on top

\_\_\_\_\_\_/5 Major quake – 1 bag on top and 1 bag on bottom

\_\_\_\_\_\_/5 Major quake – 1 bag on top and 2 bags on bottom

\_\_\_\_\_\_/5 Major quake – 2 bags on top and 2 bags on bottom

\_\_\_\_\_\_/10 Participation/Effort

**\_\_\_\_\_\_\_\_\_\_\_\_/110 Total**

\_\_\_\_\_\_\_\_ (Bonus)